



3.05 FUTURE TRAFFIC VOLUMES

Future traffic volumes along the study corridor were estimated based on the projected land uses as described in Section 3.04. As discussed earlier, two land use scenarios were developed, Scenario A (continued trend) and Scenario B (compact development) to account for differing development densities. There was very little difference in the traffic volumes produced by the two scenarios (less than 1 percent). Because of this, the Scenario A land use projections were used for all of the traffic operations modeling.

The increase in total USH 51 traffic by 2030 assuming 1.2 percent annual growth ranges from under 40 percent east of Stoughton to as much as 140 percent between McFarland and Stoughton. The increase in total USH 51 traffic by 2030 assuming 1.8 percent annual growth ranges from 45 percent to 235 percent. Traffic growth on surrounding routes, such as STH 138, CTH N, and IH 39/90 grows between 70 percent and 100 percent over the same period. Figure 3.05-1 shows the existing traffic volumes, 2030 traffic volumes assuming 1.2 percent growth, and 2030 traffic volumes assuming 1.8 percent growth throughout the study corridor. Appendix E shows the calculations used to determine the growth rates listed above and the traffic volumes shown in the figure.

Note that traffic on USH 51 in downtown Stoughton actually decreases using 1.8 percent growth when compared to the 1.2 percent growth volumes. This is because the traffic volumes projected using 1.8 percent growth exceed the capacity of USH 51 in this area. Because of this, 2030 TRANPLAN demand modeling distributed a larger proportion of the traffic onto routes other than USH 51. Operations modeling using Paramics did not show a decrease in traffic on USH 51 in downtown Stoughton; volumes were similar using the two growth rates. Because overall traffic within the corridor is higher in 2030 assuming 1.8 percent growth, this suggests that the additional vehicles are choosing routes other than USH 51.